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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,373	02/24/2004	Aleksander Zelenski	004.0115	3393

29906 7590 11/01/2006

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EXAMINER
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RACHUBA, MAURINA T

ART UNIT	PAPER NUMBER
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3723

DATE MAILED: 11/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/786,373

Applicant(s)

ZELENSKI ET AL.

Examiner

M Rachuba

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 and 15-46 is/are pending in the application.
- 4a) Of the above claim(s) 15-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 24-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Response to Amendment***

1. Applicant's amendment has overcome the previous rejection under 35 USC 102.

***Election/Restrictions***

2. Claims 15-23 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or Claims 15-23 are withdrawn from further consideration pursuant to 37 CFR linking claim. Election was made without traverse in the reply filed on 12 October 2005.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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5. Claims 1, 2, 6-10, 24-27, 29, 34-38, 42, 43, 45 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kahn, '907 in view of Holister et al '770. '907, figures 1-3 and 11, discloses the claimed invention including providing the upper grinding wheel with a spindle **12** having a channel **13**, the upper polishing tool comprising a plurality of first conduits **71, 72, 73** each having a first orifice and a second orifice, the first orifice disposed at the first working surface and the second orifice in fluid communication with the channel of the spindle; a rotary coupler **60** coupling the spindle and upper wheel, the coupler comprising a plurality of fluid distribution channels **66, 67, 68**, each channel in fluid communication at a first end of the channel of the spindle and in fluid communication at a second end with the second orifice of one of the plurality of first conduits of the upper wheel; a driver hub **50, 55** mounted to the spindle and comprising at least a portion of each of the plurality of fluid distribution channels; a plurality of second conduits **52**, the first end coupled to the second end of one of the plurality of distribution channels and the second end coupled to the second orifice of one of the plurality of first conduits; an upper wheel support member **40** comprising a plurality of third conduits, a first end of each of the plurality of third conduits in fluid communication with the second end of one of the plurality of second conduits and a second end of each of the plurality of third conduits in fluid communication with the second orifice of one of the plurality of first conduits; a rotary lead through member **20** mounted to the spindle and configured to permit the spindle to rotate relative thereto, and having at least one second conduit in fluid communication with the channel of the spindle; the second conduit of the lead through member connected to a fluid source.

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'907 does not disclose that the carriage member holding the spindle and upper abrading wheel is coupled to the base only by two support members, or that the spindle is disposed outside of and substantially parallel to the plane of the two support members.

'770, in a similar device, teaches a carriage member holding a spindle and upper abrading wheel, the carriage coupled to a base by only two support members, and the spindle disposed outside of and substantially parallel to the plane of the two support members.. It would have been obvious to one of ordinary skill in the art to have provided '907 with the support structure taught by '770, figures 1 and 16 and their descriptions, and column 1, lines 14-19, to allow easy access to the upper abrading structures for maintenance and replacement.

6. Claims 3-5, 11-13, 28, 30-33, 35, 39-41 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kahn, '907 in view of Holister et al '770 as applied to claims 1, 2, 6-10, 24-27, 29, 34-38, 42, 43, 45 and 46, and further in view of Cesna, '529. '907 as modified by '770 does not disclose the rotary drive mechanism comprising at least a first pulley and a second pulley and comprising a drive belt configured to cause rotational motion of the first pulley upon rotation of the second pulley; the carriage member coupled to at least two linear ball bearing slide assemblies, each mounted to one of said two support members for effecting vertical movement of the carriage member; or the vertical drive mechanism comprises a pneumatic cylinder, a hydraulic cylinder, or an air/oil cylinder. '529, in a similar tool, teaches driving the spindle with a belt and pulley system, the carriage member coupled to linear ball bearing slide assemblies each mounted to the support members, and an air cylinder to

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move the carriage vertically. It would have been obvious to one of ordinary skill in the art to have provided '907 as modified by '770 with the pulley drive system taught by '529, as an old and well known rotary drive system. Further, '529 teaches providing linear ball bearings and an air cylinder to connect the carriage to the supports and to reciprocate the carriage on the supports. It would have been obvious to one of ordinary skill in the art to have provided '907 as modified by '770 with the bearings and reciprocating drive taught by '529, column 9, lines 23-50, to allow precise movement of the carriage relative to the support.

Further, '907 as modified by '770 does not disclose a universal joint mounted to the driver hub, a housing mounted to the universal joint wherein the upper abrading wheel is attached to said housing; the rotary drive mechanism comprising at least a first pulley and a second pulley and comprising a drive belt configured to cause rotational motion of the first pulley upon rotation of the second pulley; the carriage member coupled to at least two linear ball bearing slide assemblies, each mounted to one of said two support members for effecting vertical movement of the carriage member; or the vertical drive mechanism comprises a pneumatic cylinder, a hydraulic cylinder, or an air/oil cylinder. '529, in a similar device, teaches providing a drive hub with a universal joint, a housing mounted to the universal joint and the tool attached to the housing. It would have been obvious to one of ordinary skill in the art to have provided '907 as modified by '770 with the universal joint structure taught by '529, column 9, lines 57-59, to allow the upper grinding tool to remain parallel with the lower tool. '529 also teaches driving the spindle with a belt and pulley system, the carriage member coupled to linear

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ball bearing slide assemblies each mounted to the support members, and an air cylinder to move the carriage vertically. It would have been obvious to one of ordinary skill in the art to have provided '907 as modified by '770 with the pulley drive system taught by '529, as an old and well known rotary drive system.

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1-13, and 24-46 have been considered but are moot in view of the new ground(s) of rejection. Applicant argues that one of ordinary skill in the art would not consider it obvious to have provided '770 with directly opposed abrading wheels, as '770 teaches that the workpiece ends are not to be ground simultaneously. The examiner agrees, and applicant's amendment has overcome the rejection based on 35 USC 102. However, '770 does teach, in combination with '907 or '529 to mount the carriage on only two supports, and the spindle outside of and parallel to the plane of the supports, to allow easy maintenance and replacement of the various abrading tool structures.

### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M Rachuba whose telephone number is 571-272-4493. The examiner can normally be reached on Monday-Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 571-272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

M Rachuba  
Primary Examiner  
Art Unit 3723

  
10/26/03